Figure 1

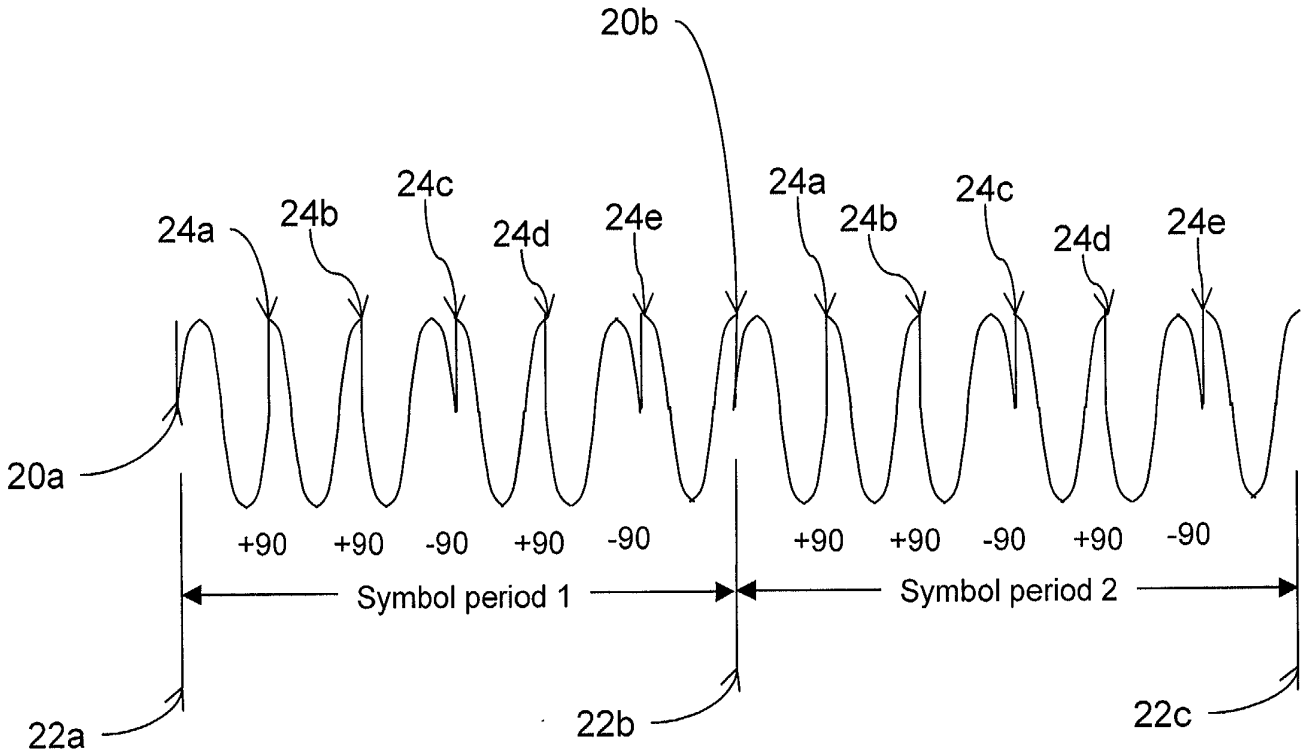

20b
24a
24b
24c
24d
24e
24a
24b
24c
24d
24e
20a
+90
+90
-90
+90
-90
+90
+90
-90
+90
-90
Symbol period 1
Symbol period 2
22a
22b
22c

Figure 2a

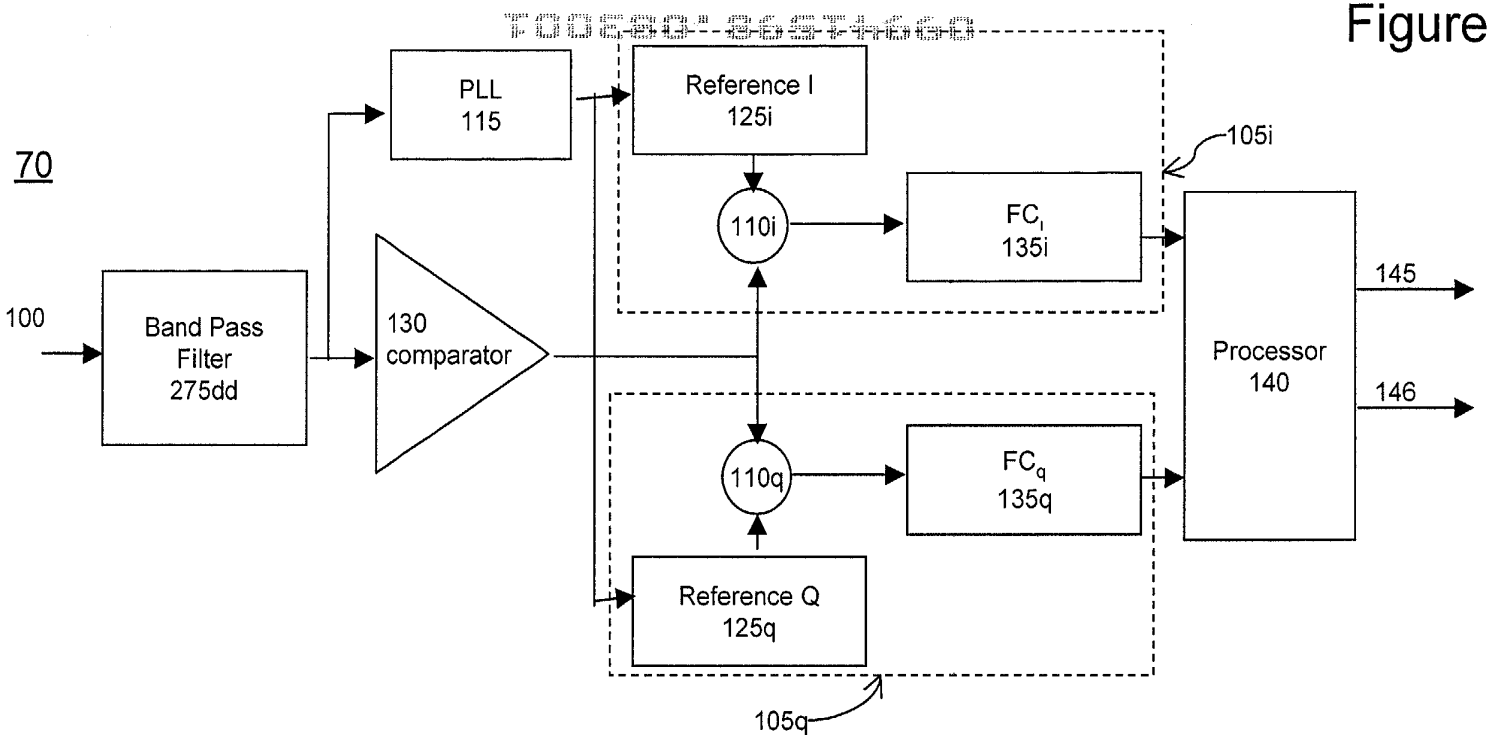


Figure 2b

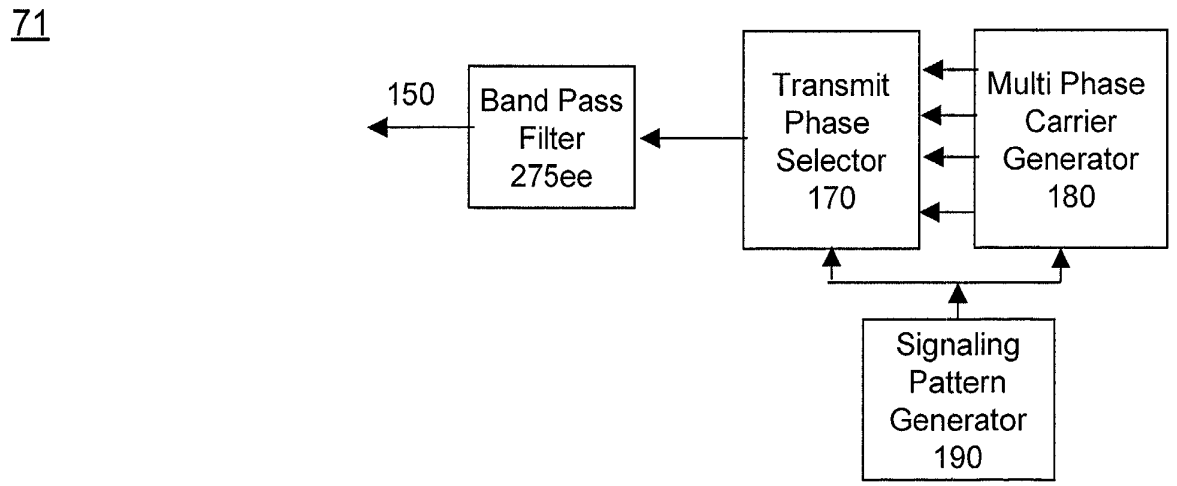


Figure 3

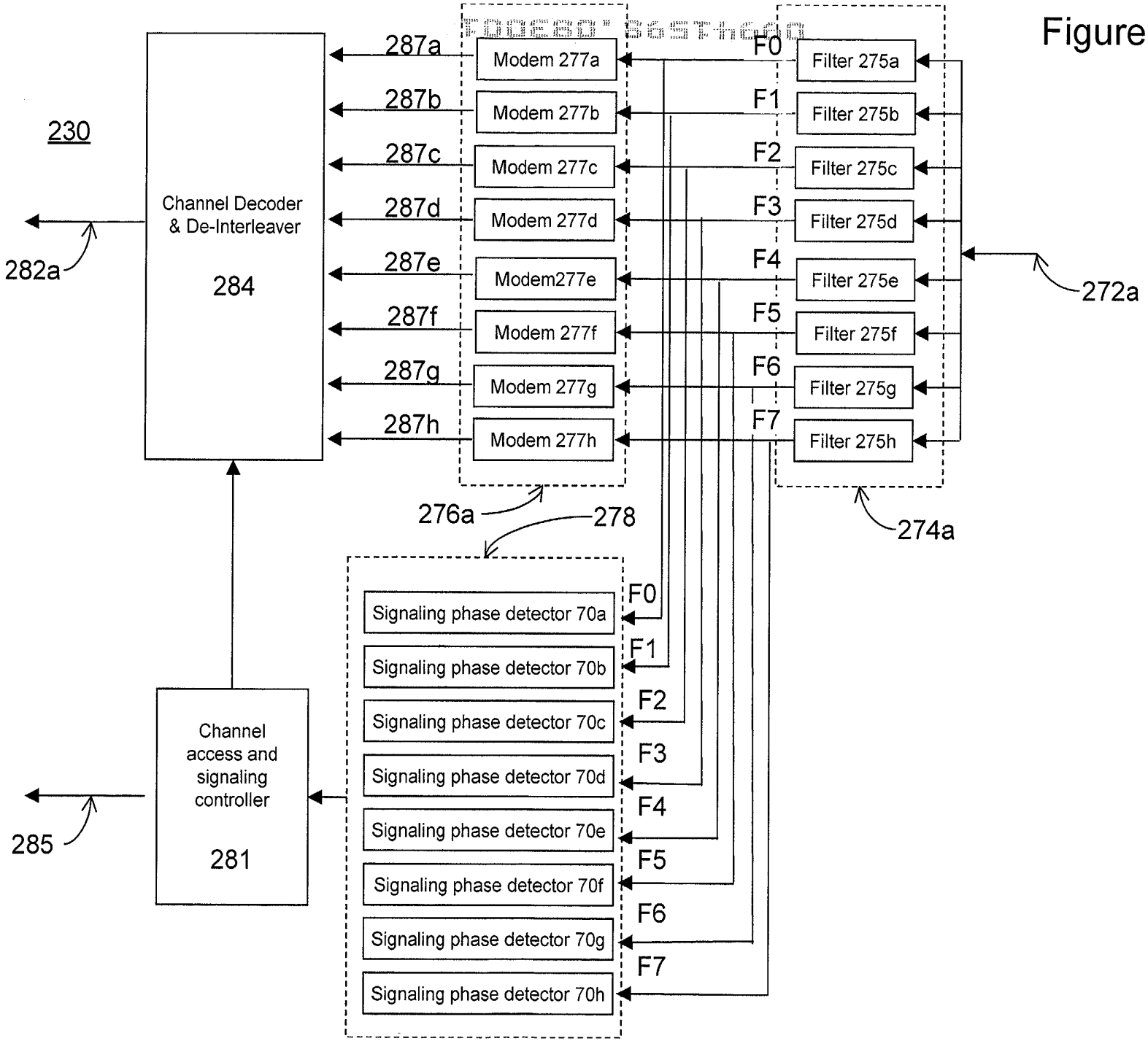
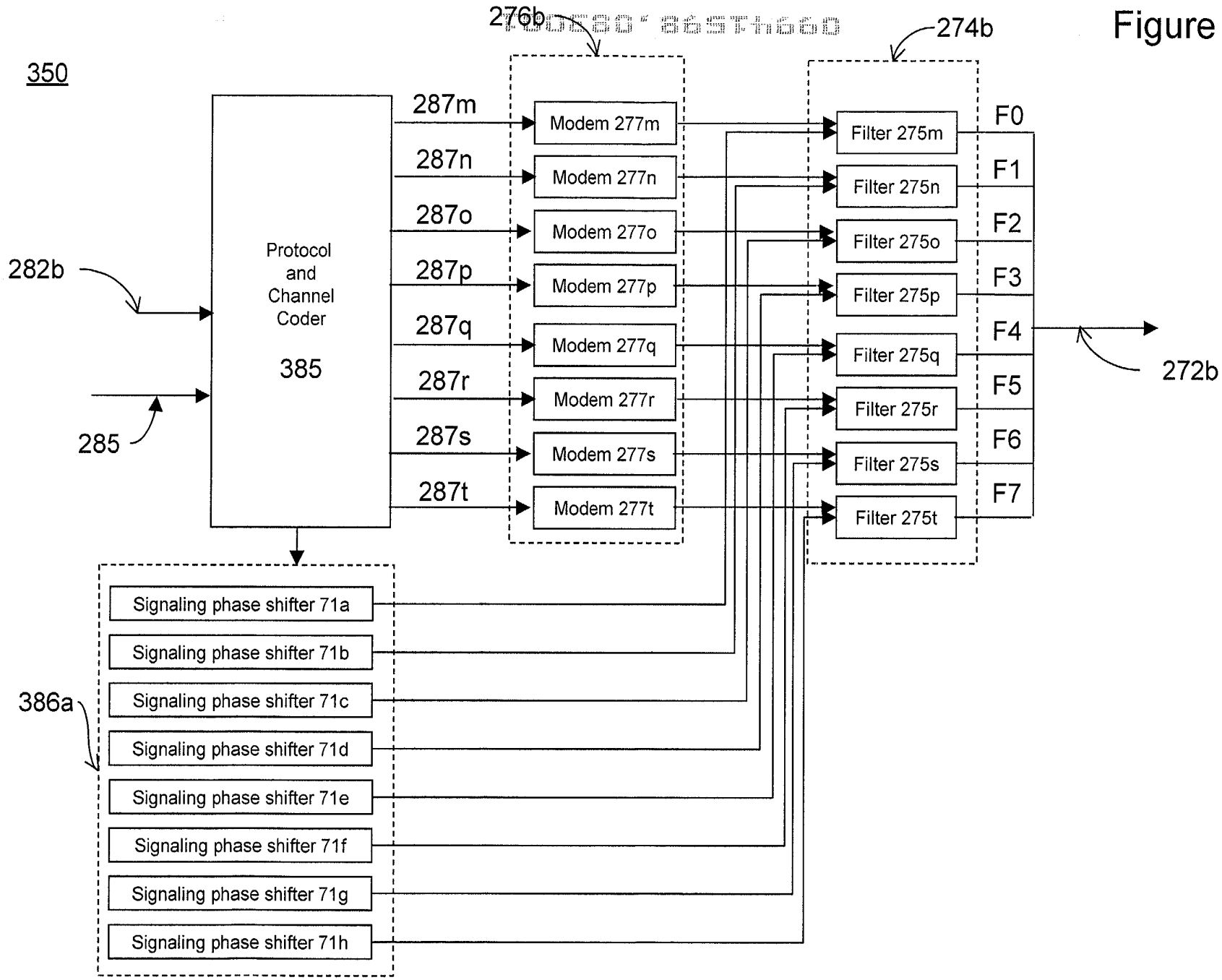

230
Channel Decoder & De-Interleaver
284
282a
287a
287b
287c
287d
287e
287f
287g
287h
Modem 277a
Modem 277b
Modem 277c
Modem 277d
Modem277e
Modem 277f
Modem 277g
Modem 277h
276a
278
F0
F1
F2
F3
F4
F5
F6
F7
Filter 275a
Filter 275b
Filter 275c
Filter 275d
Filter 275e
Filter 275f
Filter 275g
Filter 275h
272a
274a
Signaling phase detector 70a
Signaling phase detector 70b
Signaling phase detector 70c
Signaling phase detector 70d
Signaling phase detector 70e
Signaling phase detector 70f
Signaling phase detector 70g
Signaling phase detector 70h
Channel access and signaling controller
281
285

Figure 4


350
276b
274b
282b
285
Protocol and Channel Coder
385
287m
287n
287o
287p
287q
287r
287s
287t
Modem 277m
Modem 277n
Modem 277o
Modem 277p
Modem 277q
Modem 277r
Modem 277s
Modem 277t
Filter 275m
Filter 275n
Filter 275o
Filter 275p
Filter 275q
Filter 275r
Filter 275s
Filter 275t
F0
F1
F2
F3
F4
F5
F6
F7
272b
386a
Signaling phase shifter 71a
Signaling phase shifter 71b
Signaling phase shifter 71c
Signaling phase shifter 71d
Signaling phase shifter 71e
Signaling phase shifter 71f
Signaling phase shifter 71g
Signaling phase shifter 71h

460

Figure 5

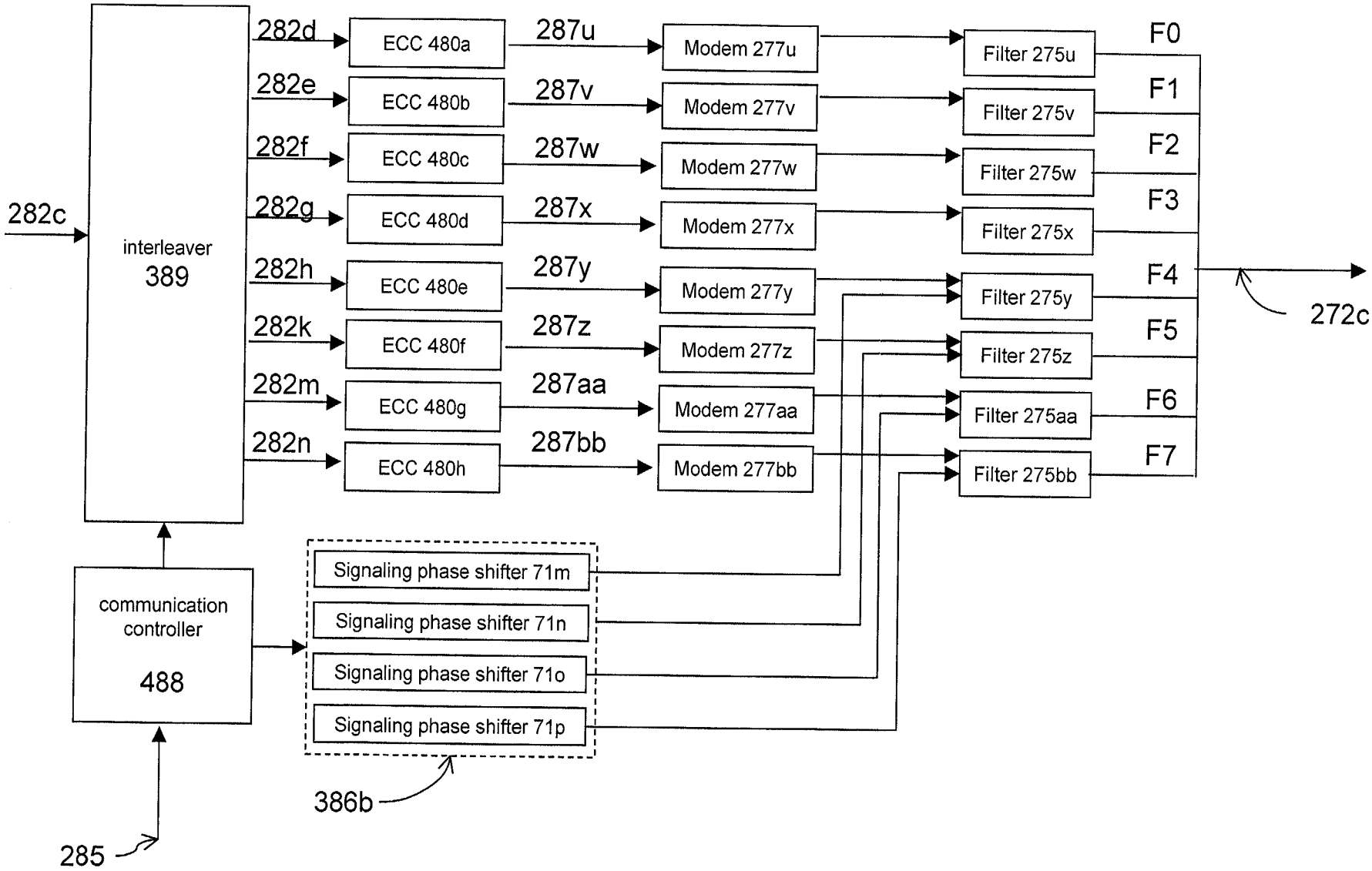

282c
interleaver
389
282d
282e
282f
282g
282h
282k
282m
282n
ECC 480a
ECC 480b
ECC 480c
ECC 480d
ECC 480e
ECC 480f
ECC 480g
ECC 480h
287u
287v
287w
287x
287y
287z
287aa
287bb
Modem 277u
Modem 277v
Modem 277w
Modem 277x
Modem 277y
Modem 277z
Modem 277aa
Modem 277bb
Filter 275u
Filter 275v
Filter 275w
Filter 275x
Filter 275y
Filter 275z
Filter 275aa
Filter 275bb
F0
F1
F2
F3
F4
F5
F6
F7
272c
communication controller
488
Signaling phase shifter 71m
Signaling phase shifter 71n
Signaling phase shifter 71o
Signaling phase shifter 71p
386b
285

Figure 6

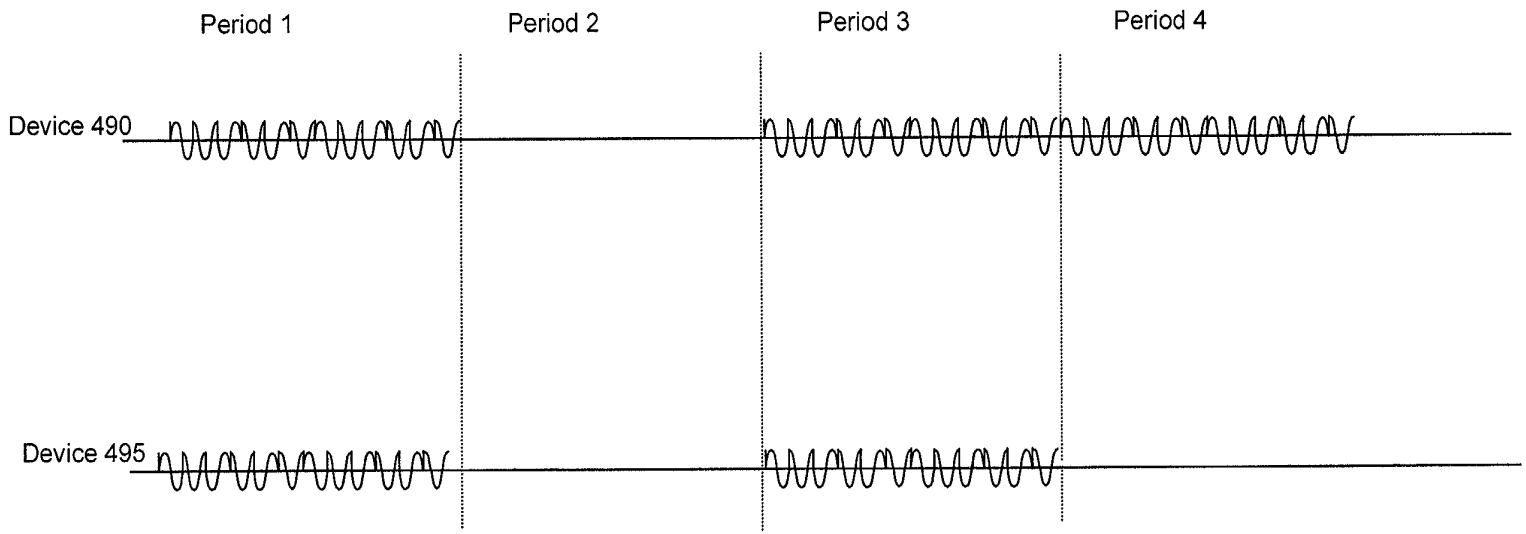
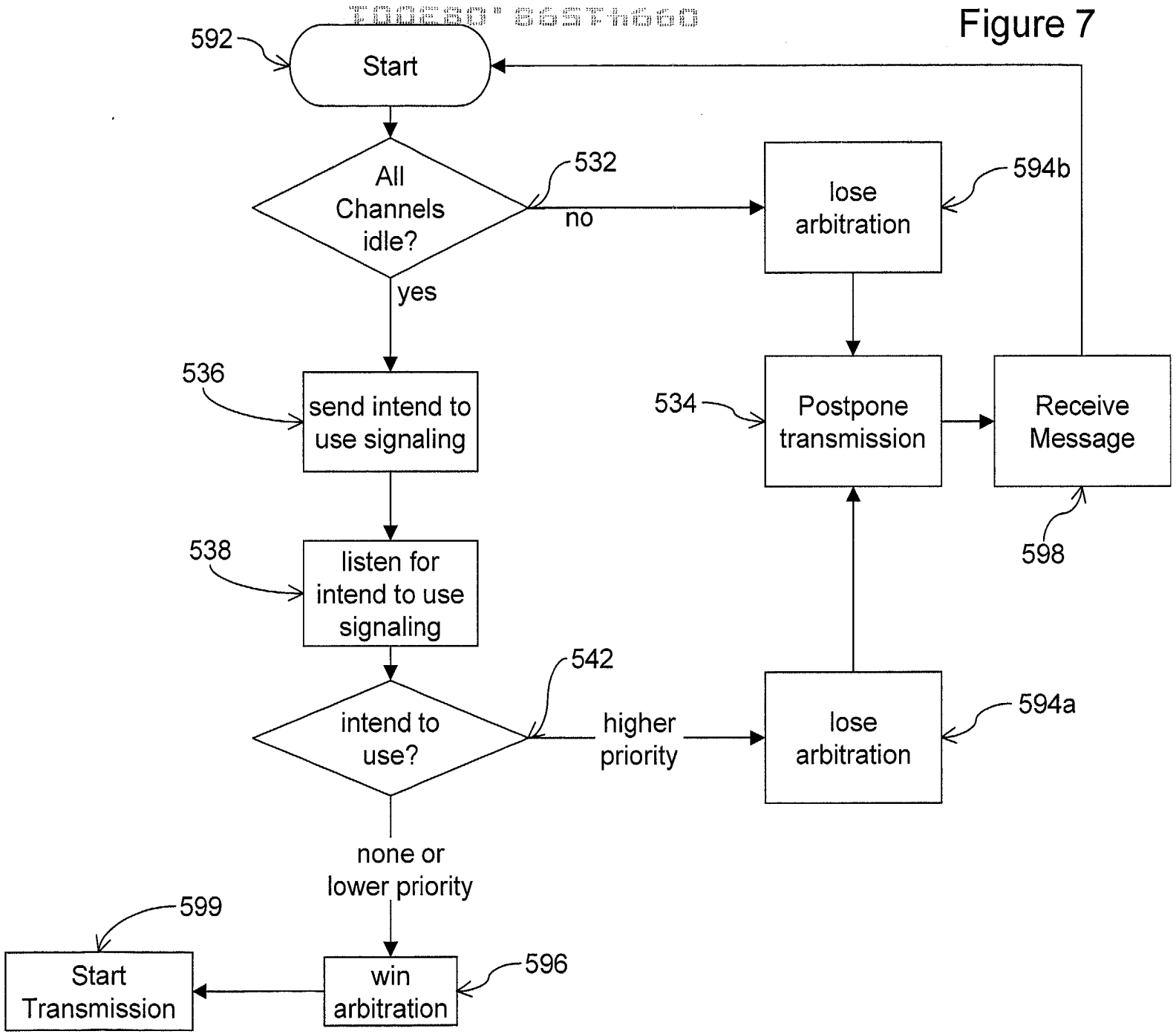


Figure 7


592
Start
All Channels idle?
532
no
yes
lose arbitration
594b
536
send intend to use signaling
534
Postpone transmission
Receive Message
598
538
listen for intend to use signaling
542
intend to use?
higher priority
lose arbitration
594a
none or lower priority
599
Start Transmission
win arbitration
596

TDE280 86Th60

Figure 8

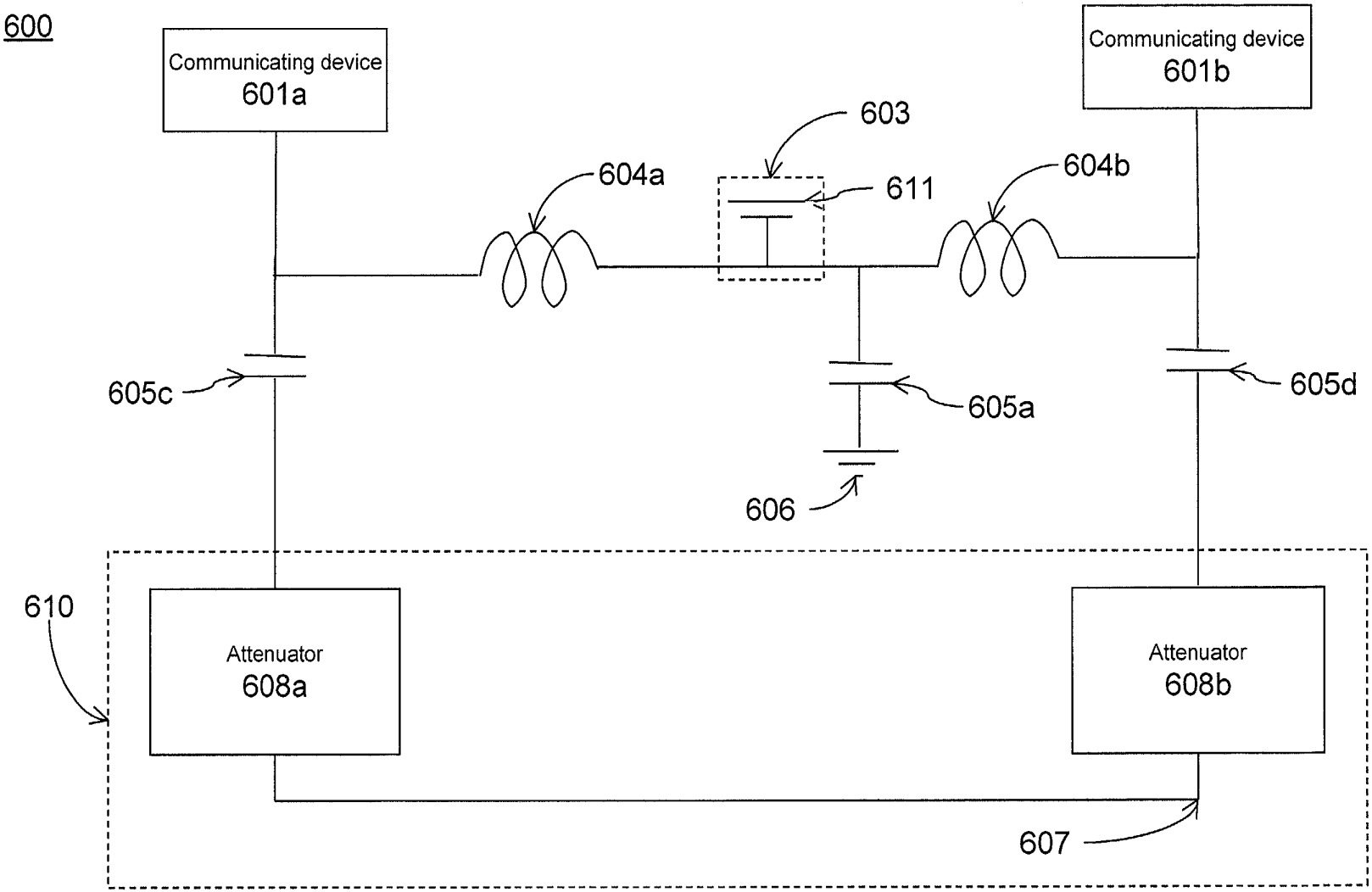
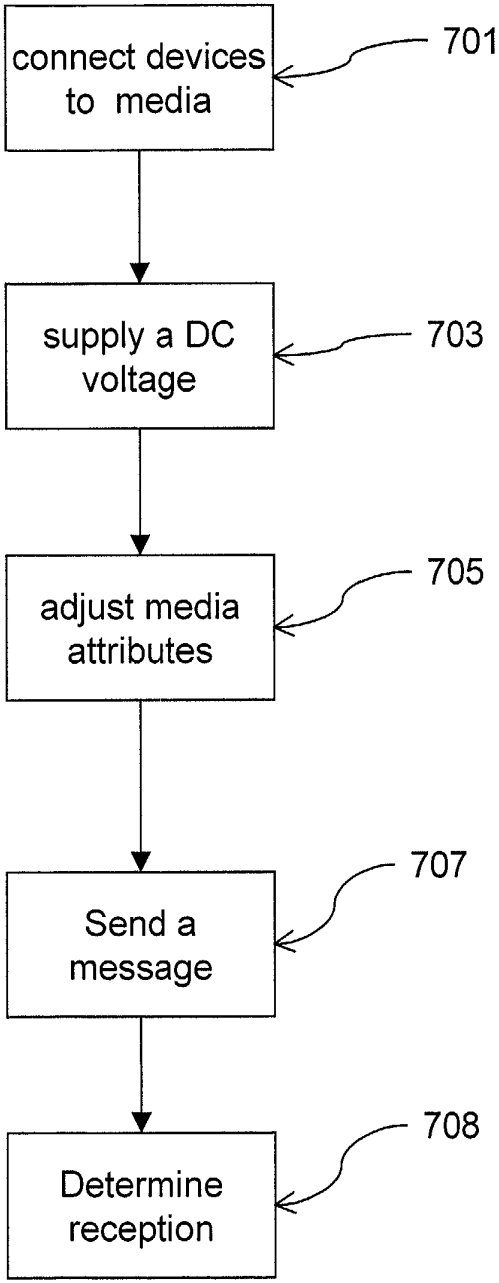


Figure 9


connect devices to media
701
supply a DC voltage
703
adjust media attributes
705
Send a message
707
Determine reception
708